Format No: CP/TF/01

TEST REPORT ON BITUMEN

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 26-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer's Reference	:	BBMP/EE/BTP/WO/27/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	24-01-23
Sample Type	:	Bitumen
Reference to BIS codes	:	IS: 1201-2021, IS: 1202-1220(1978) (Reaffirmed-2019)
Date of Test	:	24-01-23

Test Results

Sl.no	Name of Test	Result	Requirements as per IS:73-2013
1	Penetration at 25°C , in 1/10th mm	**53**	Min 45mm
2	Softening Point, °C	**51.6**	Min. 47°C
3	Ductility, cm	**98**	Min. 40cm
4	Flash point, °C	**302**	Min. 220°C
	Fire point, °C	**312**	

* The results obtained are satisfactory as per standard requirements.

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DETERMINATION OF RATE OF SPREAD TACK COAT

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 31-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23
Sample Condition	:	Satisfactory
Date of Receipt	:	30-01-23
Type of Mix	:	Tack coat
Date of Test	:	30-01-23

Sl.No	Determination	Unit	TEST 1	TEST 2
1	Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30
2	Area of Plate (a)	Sq.mtr	0.09	0.09
3	Initial Wt of empty Plate (b)	Kg	0.78	0.748
4	Final weight of plate after application of tack Coat (c)	Kg	0.803	0.771
5	Weight of tack Coat (d=c-b)	Kg	0.023	0.023
6	Rate of spread of tack coat	Kg/sq.m	0.256	0.256
7	Average	Kg/sq.m	0.256	
8	Specified Limit	Kg/sq.m	0.250 Kg/sq.m	

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TEST REPORT OF AGGEGRATE IMPACT VALUE
IS: 2386 Part IV

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 23-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	21-01-23
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of Test	:	21-01-23

Sl.No	Particulars of observations	Index	TEST 1	TEST 2
1	Total weight of the surface dry sample sample (passing 12.5 mm and retained on 10mm sieve)	A	300.2	300.2
2	Weight of fraction passing 2.36mm sieve After giving 15 blows	B	73.9	74.0
3	weight of fraction retained 2.36mm sieve After giving 15 blows	C	225.9	225.8
4	Total weight of (B+C) is less than the initial weight (Weight A) by more than one gram the result shall be discarded and a fresh test made.	A-(B+C)	0.4	0.4
5	Aggregate impact value	(B/A)*100	24.6	24.7
6	Aggregate impact value (Mean of two tests)	Pecentage	24.6	

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DETERMINATION OF FLAKINESS INDEX AND ELONGATION INDEX OF COARSE AGGREGATE(IS 2386 (Part 1) 1963 (RA 2007)

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 23-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	21-01-23
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of Test	:	21-01-23

Result:

Index	Percentage of Flakiness and Elongation Index	Secified limits as per MORTH specification table 400-12
Flakiness Index	12.8%	Combined Flakiness & Elongation Index for WMM is Maximum 35%
Elongation Index	12.5%	
Combined Flakiness and Elongation Index for WMM	12.5%	

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TEST RESULTS OF GRADATION FOR DBM
(IS 2386:(Part 1) 1963 (RA2011)

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 23-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	20-01-23
Type of Mix	:	DBM-Plant (Dense Bituminous Macadam)
Date of Test	:	20-01-23
Weight of Sample	:	5000 Grams

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10 (grading -2)
37.5	0	0	0	100	100
26.5	250	250	5.00	95.00	90-100
19	350	600	12.00	88.00	71-95
13.2	450	1050	21.00	79.00	56-80
4.75	1750	2800	56.00	44.00	38-54
2.36	400	3200	64.00	36.00	28-42
0.3	1350	4550	91.00	9.00	7-21
0.075	250	4800	96.00	4.00	2-8
PAN	200	5000	0.00	0	0

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TEST RESULTS OF GRADATION FOR WMM

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 23-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	21-01-23
Type of Mix	:	WMM (Wet Mix Macadam)
Date of Test	:	21-01-23
Oven Dry Weight	:	11000 Grams

IS Sieve Size(mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	% Cumulative Weight Retained	% Passing	Spec.I.Vide Table 400.13 MORTH Specification
53	0	0	0.0	100.0	100
45	298	298	2.7	97.3	95-100
22.4	2241	2539	23.1	76.9	60-80
11.2	2159	4698	42.7	57.3	40-60
4.75	2251	6949	63.2	36.8	25-40
2.36	1611	8560	77.8	22.2	15-30
0.6	635	9195	83.6	16.4	8-22
0.075	1338	10533	95.8	4.2	0-5

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PHYSICAL REQUIREMENTS FOR COARSE AGGREGATE FOR DENSE BITUMINOUS MACADAM

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 23-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	20-01-23
Type of Mix	:	DBM (Dense Bituminous Macadam)
Date of Test	:	20-01-23

Table 500-6 : Physical Requirements fo Coarse Aggregate for Dense Bituminous Macadam

Property	Test	Result	Specification	Method of Test
Partical Shape	Flakiness Index	12.0	Combined Flakiness & Elongation Index for DBM is Maximum 35%	IS:2386 Part I
	Elongation Index	14.0		
Strength	Aggregate Impact Value	22.0	Maximum 30%	IS:2386 Part IV
Specific gravity	Specific gravity	2.58	Maximum 2.7	IS:2386 Part III
Water Absorption	Water Absorption	0.38	Maximum 2%	IS:2386 Part III

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TESTS RESULTS ON STABILITY OF MIX

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 23-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23
Source of Sample	:	Hot Mix Plant, Bangalore
Sample Condition	:	Satisfactory
Date of Receipt	:	20-01-23
Type of Mix	:	DBM (Dense Bituminous Mecadam)
Date of Test	:	20-01-23

The results of the tests conducted on the Dense Bituminous Macadam mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.29	11.82	9KN(Min)
2	Marshal flow at 60°C, mm	3.54	3.87	2-4
3	Percent air Voids	4.56	4.17	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.54	14.76	13-15
5	Percent Voids filled with Bitumen(VFB %)	68.98	70.28	65-75
6	Density, g/cc	2.42	2.40	–

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TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 23-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	20-01-23
Type of Mix	:	DBM(Dense Bitumnous Macadam)
Date of Test	:	20-01-23

Type of Binder	:	60/70
% of Binder Used	:	4.5%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	9.0 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.0	2.0	98.2	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

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TEST RESULTS OF BITUMEN BINDAR CONTENT AND GRADATION FOR DBM
(IS 2386:(Part 1) 1963 (RA2011)

Lab ID	:	**CP-RW-2023-03-31-41**	**Date: 29-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.	
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.	
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra	
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094	
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23	
Source of Sample	:	Sample supplied by Agency	
Date of Receipt	:	28-01-23	
Type of Mix	:	DBM (Dense Bituminous Macadam)	
Date of Test	:	28-01-23	

Sl.no	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	W1	500	500
2	Weight of the sample After extraction	W2	479	479.5
3	Initial weight of Paper	W3	4	4
4	Final weight of Paper	W4	6	6
5	Increase in weight of Filter Paper	W5=W4-W3	2	2
6	Bitumen percentage	$\frac{W1-W2+W5}{W1}$ X 100	4.6	4.50
7	Average percentage	%	4.55	

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Lab ID : **CP-RW-2023-03-31-41** **Date: 29-01-23**

AFTER EXTRACTION(Trail-1)

Weight of Sample(gm) : 479

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0.0	100.0	100
26.5	18	18	3.8	96.2	90-100
19	47	65	13.6	86.4	71-95
13.2	51	116	24.2	75.8	56-80
4.75	175	291	60.8	39.2	38-54
2.36	50	341	71.2	28.8	28-42
0.3	42	383	80.0	20.0	7-21
0.075	60	443	92.5	7.5	2-8

AFTER EXTRACTION(Trail-2)

Weight of Sample(gm) : 479.5

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0.0	100.0	100
26.5	12	12	2.5	97.5	90-100
19	48	60	12.5	87.5	71-95
13.2	37	97	20.2	79.8	56-80
4.75	198	295	61.5	38.5	38-54
2.36	35	330	68.8	31.2	28-42
0.3	50	380	79.2	20.8	7-21
0.075	78	458	95.5	4.5	2-8

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TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2007)

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 26-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	24-01-23
Type of Mix	:	BC-Plant (Bituminous Concrete)
Date of Test	:	24-01-23
Oven Dry Weight	:	5000 Grams

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-17(grading-2)
19	0	0	0.0	100.0	100
13.2	87	87	1.7	98.3	90-100
9.5	702	789	15.8	84.2	70-88
4.75	893	1682	33.6	66.4	53-71
2.36	547	2229	44.6	55.4	42-58
1.18	485	2714	54.3	45.7	34-48
0.6	503	3217	64.3	35.7	26-38
0.3	528	3745	74.9	25.1	18-28
0.15	451	4196	83.9	16.1	12-20
0.075	365	4561	91.2	8.8	4-10
PAN	439	5000	100	0.0	0

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TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 27-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	24-01-23
Type of Mix	:	BC(Bitumenous Concrete)
Date of Test	:	24-01-23

Type of Binder	:	60/70
% of Binder Used	:	5.0%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	10.8 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.5	1.5	98.3	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

* The results obtained are satisfactory as per standard requirements.

Note:-
The results pertain to the samples received and tested.
All information Furnished by Agency/ Representative
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Samples will be disposed after 30 days from the date of issue of test certificate

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

AEE (WRP)(S)

****End of Report****

PHYSICAL REQUIREMENTS FOR COARSE AGGREGATE FOR BITUMINOUS CONCRETE

Lab ID	:	**CP-RW-2023-03-31-41**	**Date: 27-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.	
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.	
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra	
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094	
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23	
Source of Sample	:	Sample supplied by Agency	
Sample Condition	:	Satisfactory	
Date of Receipt	:	24-01-23	
Type of Mix	:	BC (Bituminous Concrete)	
Date of Test	:	24-01-23	

Table 500-16 : Physical Requirements fo Coarse Aggregate for Bituminous Concrete

Property	Test	Result	Specification	Method of Test
Partical Shape	Flakiness Index	12.4	Combined Flakiness & Elongation Index for BC is Maximum 35%	IS:2386 Part I
	Elongation Index	11.8		
Strength	Aggregate Impact Value	22.1	Maximum 24%	IS:2386 Part IV
Specific gravity	Specific gravity	2.68	Maximum 2.7	IS:2386 Part III
Water Absorption	Water Absorption	0.21	Maximum 2%	IS:2386 Part III

* The results obtained are satisfactory as per standard requirements.

Note:-

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End of Report

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HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

TESTS RESULTS ON STABILITY OF MIX

Lab ID	:	**CP-RW-2023-03-31-41** **Date: 27-01-23**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra
Agency	:	Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094
Customer Reference	:	BBMP/EE/BTP/WO/27/2022-23
Source of Sample	:	Hot Mix Plant, Bangalore
Sample Condition	:	Satisfactory
Date of Receipt	:	24-01-23
Type of Mix	:	BC (Bituminous Concrete)
Date of Test	:	24-01-23

The results of the tests conducted on the Bituminous Concrete mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.14	11.13	10KN(min)
2	Marshal flow at 60°C, mm	3.52	3.51	2-4
3	Percent air Voids	4.82	4.83	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.28	14.26	13-15
5	Percent Voids filled with Bitumen(VFB %)	71.87	71.63	65-75
6	Density, g/cc	2.25	2.26	–

* The results obtained are satisfactory as per standard requirements.

Note:-

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Authorized Signatory
Quality Manager

End of Report

TEST RESULTS OF BITUMEN BINDAR CONTENT AND GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2011)

Lab ID : **CP-RW-2023-03-31-41** **Date: 31-01-23**

Customer : Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.

Address : Vidyaranyapura Sub Division, BBMP, Bangalore.

Project Name : Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra

Agency : Sri.Subba Reddy K V, No:106/B Aswatha, Narayana RMV, 2nd Stage Bangalore-560094

Customer Reference : BBMP/EE/BTP/WO/27/2022-23

Source of Sample : Sample supplied by Agency

Date of Receipt : 30-01-23

Type of Mix : BC (Bituminous Concrete)

Date of Test : 30-01-23

Sl.no	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	W1	500	500
2	Weight of the sample After extraction	W2	474	475
3	Initial weight of Paper	W3	4	4
4	Final weight of Paper	W4	6	6
5	Increase in weight of Filter Paper	W5=W4-W3	2	2
6	Bitumen percentage	$\frac{W1-W2+W5}{W1}$ X 100	5.60	5.40
7	Average percentage	%	5.5	

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Lab ID : **CP-RW-2023-03-31-41** **Date: 31-01-23**

AFTER EXTRACTION - Trail-1

Total Weight of the Sample(gm) : 474

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	4	4	0.8	99.2	90-100
9.5	62	66	13.9	86.1	70-88
4.75	112	178	37.6	62.4	53-71
2.36	88	266	56.1	43.9	42-58
1.18	29	295	62.2	37.8	34-48
0.6	11	306	64.6	35.4	26-38
0.3	46	352	74.3	25.7	18-28
0.15	45	397	83.8	16.2	12-20
0.075	55	452	95.4	4.6	4-10

AFTER EXTRACTION - Trail-2

Total Weight of the Sample(gm) : 475

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	4	4	0.8	99.2	90-100
9.5	62	66	13.9	86.1	70-88
4.75	112	178	37.5	62.5	53-71
2.36	88	266	56.0	44.0	42-58
1.18	29	295	62.1	37.9	34-48
0.6	11	306	64.4	35.6	26-38
0.3	46	352	74.1	25.9	18-28
0.15	45	397	83.6	16.4	12-20
0.075	55	452	95.2	4.8	4-10

* The results obtained are satisfactory as per standard requirements.

Note:-

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R KARTHIK RECHAN
Authorized Signatory
Quality Manager

AEE (VRP) SD

End of Report

QC ABSTRACT

NAME OF WORK: Repairs and Maintenance of Roads and drains in ward no.10 Doddabommasandra

SL NO	Item Of Work	Name of Test	Frequency of Test/Quantity	Executed Quantity	Number of Tests Required	Number of Tests Conducted
		Materials				
1	WMM	Sieve Analysis	One Test		1	1
		Impact Value	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
2	DBM	SIEVE ANALYSIS	One Test		1	1
		STRIPPING VALUE	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		IMPACT VALUE	One Test		1	1
		Specific gravity	One Test		1	1
		Water Absorption	One Test		1	1
		Marshal Stability	One Test		1	1
		Marshal flow	One Test		1	1
		Percent air Voids	One Test		1	1
		Percent Voids in mineral Aggregate	One Test		1	1
		Percent Voids filled with Bitumen	One Test		1	1
		Density	One Test		1	1
		Gradation	One Test		1	1
3	BC	SIEVE ANALYSIS	One Test		1	1
		STRIPPING VALUE	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		IMPACT VALUE	One Test		1	1
		Specific gravity	One Test		1	1
		Water Absorption	One Test		1	1
		Marshal Stability	One Test		1	1
		Marshal flow	One Test		1	1
		Percent air Voids	One Test		1	1
		Percent Voids in mineral	One Test		1	1
		Percent Voids filled with Bitumen	One Test		1	1
		Density	One Test		1	1
		Gradation	One Test		1	1
4	BITUMEN	Ductility	One Test		1	1
		Softening Point	One Test		1	1
		Penetration	One Test		1	1
		Flash Point	One Test		1	1
		Fire Point	One Test		1	1
5	TACK COAT	Rate of spread	One Test		1	1

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